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(12) **United States Patent**
Kimura

(10) **Patent No.:** US 7,646,143 B2
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(54) **SELF-LIGHT EMITTING DEVICE AND ELECTRICAL APPLIANCE USING THE SAME**

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(73) Assignee: Semiconductor Energy Laboratory Co., Ltd. (JP)

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(58) **Field of Classification Search** 313/501,
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See application file for complete search history.

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(57) **ABSTRACT**

A self-light emitting device and an electrical appliance including the same are provided, in which extracting efficiency of light from a light emitting element, especially in an EL element, can be improved. A light scattering body formed by etching a transparent film is provided on an insulator so that the extracting efficiency of light can be improved, and the self-light emitting device with high efficiency of light emission can be provided.

20 Claims, 16 Drawing Sheets

